

Agilent Ref: 10010116-1
United States Application Serial No. 10/632,600

Amendments

1. (Currently Amended) A method of removing laser debris from a laser-scribed ~~modifying a~~ substrate surface, said method comprising:

- (a) contacting said substrate surface with particulate-comprising fluid having a pH above the isoelectric point of said substrate; and
- (b) ultrasonically or sonically agitating said particulate-comprising fluid in contact with said substrate to modify ~~remove laser debris from~~ said substrate surface.

2. (Original) The method of Claim 1, wherein said particulate-comprising fluid is non-acidic.

3. (Original) The method of Claim 2, wherein said fluid has a basic pH.

4. (Original) The method of Claim 1, wherein said particulate-comprising fluid comprises particulate ranging in size from about 15 nanometers to about 500 microns.

5. (Original) The method of Claim 1, wherein said particulate-comprising fluid comprises particulates in a concentration ranging from about 1 % to about 99 % by volume.

6. (Original) The method of Claim 5, wherein said particulate-comprising fluid comprises particulates in a concentration ranging from about 1 % to about 50 % by volume.

7. (Original) The method of Claim 1, wherein said particulate-comprising fluid is agitated at a frequency ranging from about 20 kHz to about 200 kHz.

8. (Original) The method of Claim 1, wherein said particulates and said fluid have substantially the same specific gravity.

Agilent Ref: 10010116-1
United States Application Serial No. 10/632,600

9. (Original) The method of Claim 1, wherein said fluid is chosen from water, toluene, ethanol, acetone, acetyl nitrile, dichloromethane, water with calcium chloride and water with lithium chloride.

10. (Original) The method of Claim 1, wherein said particulates are chosen from silica, metals, metal oxides, synthetic polymers, natural polymers, ceramics and fossilized silica deposits.

11. (Original) The method of Claim 10, wherein said particulates are elastic.

12. (Original) The method of Claim 1, wherein said substrate is laser-scribed glass.

13. (Original) The method of Claim 12, further comprising producing an array of probes on said modified laser-scribed glass substrate.

14. (Withdrawn) A method of modifying a laser-scribed glass substrate surface, said method comprising:

(a) contacting said laser-scribed glass substrate surface with a particulate-comprising fluid; and

(b) ultrasonically or sonically agitating said particulate-comprising fluid to modify said laser-scribed glass substrate surface.

15. (Withdrawn) The method of Claim 14, wherein said particulate-comprising fluid has a pH above the isoelectric point of said laser-scribed glass substrate.

16. (Withdrawn) The method of Claim 14, wherein said particulates are synthetic polymers.

17. (Withdrawn) The method of Claim 14, wherein said particulates and said fluid have substantially the same specific gravity.

Agilent Ref: 10010116-1
United States Application Serial No. 10/632,600

18. (Withdrawn) The method of Claim 14, wherein said particulate-comprising fluid is non-acidic.

19. (Withdrawn) A method of modifying a substrate surface, said method comprising:

(a) contacting said substrate surface with a synthetic polymer-comprising fluid; and

(b) ultrasonically or sonically agitating said synthetic polymer-comprising fluid to modify said substrate surface.

20. (Withdrawn) The method of Claim 19, wherein said synthetic polymer-comprising fluid has a pH above the isoelectric point of said laser-scribed glass substrate.

21. (Withdrawn) The method of Claim 19, wherein said substrate is laser-scribed glass.

22. (Withdrawn) The method of Claim 19, wherein said synthetic polymer and said fluid have substantially the same specific gravity.

23. (Withdrawn) The method of Claim 19, wherein said synthetic polymer-comprising fluid is non-acidic.

24. (Withdrawn) A method of modifying a substrate surface, said method comprising:

(a) contacting said substrate surface with a basic, particulate-comprising fluid; and

(b) ultrasonically or sonically agitating said basic, particulate-comprising fluid to modify said substrate surface.

25. (Withdrawn) The method of Claim 24, wherein said basic particulate-comprising fluid has a pH above the isoelectric point of said substrate.

26. (Withdrawn) The method of Claim 24, wherein said particulates are synthetic polymers.

Agilent Ref: 10010116-1
United States Application Serial No. 10/632,600

27. (Withdrawn) The method of Claim 24, wherein said particulates and said basic fluid have substantially the same specific gravity.

28. (Withdrawn) The method of Claim 24, wherein said substrate is laser-scribed glass.

29. (Withdrawn) A substrate modified according to Claim 1.

30. (Original) A method for producing a biopolymeric array, said method comprising:

- (a) modifying at least one surface of a substrate according to Claim 1 to provide a modified substrate; and
- (b) producing an array of probes on said modified substrate.

31. (Original) A biopolymeric array produced according to Claim 30.

32. (Original) A method for producing a biopolymeric array on a laser-scribed glass substrate, said method comprising:

- (a) modifying at least one surface of a laser-scribed glass substrate according to Claim 1 to provide a modified laser-scribed glass substrate; and
- (b) producing an array of probes on said modified laser-scribed glass substrate.

33. (Original) A method comprising exposure of a biopolymeric array of Claim 32 to a sample and performing a binding assay with said biopolymeric array.

34. (Original) A method comprising, following exposure of a biopolymeric array of Claim 33 to a sample, reading said biopolymeric array.

35. (Original) A method comprising forwarding data representing a result of a reading obtained by the method of Claim 34.

Agilent Ref: 10010116-1
United States Application Serial No. 10/632,600

36. (Original) The method according to claim 35, wherein said data is transmitted to a remote location.

37. (Withdrawn) A device for modifying a substrate surface comprising a particulate-comprising fluid contained therein having a pH above the isoelectric point of said substrate, wherein said device is capable of ultrasonically or sonically agitating said particulate-comprising fluid.

38. (Withdrawn) A system for modifying a substrate surface, said system comprising:

- (a) a device capable of ultrasonically or sonically agitating a fluid contained therein; and
- (b) a particulate-comprising fluid for use with said apparatus having a pH above the isoelectric point of said substrate.

39. (Original) A kit comprising:

- (a) fluidic medium;
- (b) particulates for use with said fluidic medium; and
- (c) instructions to combine said fluidic medium and said particulates to produce a particulate-comprising fluid for use in the method of Claim 1.